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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/822,147	04/12/2004	Kazuo Kuroda	4105-30	1165

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ARLINGTON, VA 22203

EXAMINER
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PSITOS, ARISTOTELIS M

ART UNIT	PAPER NUMBER
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2627

MAIL DATE	DELIVERY MODE
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05/11/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

**Application No.**

10/822,147

**Applicant(s)**

KURODA, KAZUO

**Examiner**

Aristotelis M. Psitos

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 07 March 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,3-6,8,10,11 and 13-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-6,8,10,11,13-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

Applicant's response of 3/7/07 has been considered with the following results.

#### ***Specification***

The amendment title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. Since the invention appears to be drawn to some sort of oblique/offset angular holographic one-dimensional modulation system, at the very least such phraseology should appear in the title.

#### ***Claim Objections***

All claims are objected to under 37 CFR 1.75(d) (1), as failing to conform to the invention as described. The newly inserted terminology with respect to "oblique", "offset", "shifted" as now introduced into the claims fails to conform. The examiner cannot readily map such terms with the remainder of the specification. The remaining dependent claims fail accordingly.

#### **Claim Grouping**

The following claim groupings are established by the examiner for referring to the art rejections below.

I – apparatus for recording Holographic information/disc:

a) claims 1,3,4,5,6

b) claims 11, 13,14

c) claim 18

II – method(s) for recording holographic information/disc:

a) claim 8 – parallels the apparatus of claim 1, and claim 17.

b) claim 15 – parallels the apparatus of claim 11.

III – product by process claims:

a) claim 10 by process of claim 8.

b) claim 16 by process of claim 15.

IV. Product

a) claim 19

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V. Reproducing apparatus

a) claim 20.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

1. Claims 1,3-6,8,10,11,13-20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Note the above problem with respect to the newly introduced terms in the independent claims. In addition, there is no disclosure as to how such angular deviation is performed, i.e., by what element/elements.

Claim 19 is rejected. This claim is not understood. If it is a product, a holographic disc, what is its structure? That it has encoded information is nothing more than a desired function, and no specifics drawn to the products structure (not its data structure) is recited..

Claim 20 is confusing. If this is a single means claim, then naturally, such is prohibited under present USPTO practice – see *In re Hyatt, 218 USPQ 195 (Fed. Cir. 1983).*

Alternative, there doesn't appear to be any element/means recited but purely desired results. If this is an "omnibus" claim, again such is not in conformity with present USPTO practice.

As far as the claims are interpreted and understood, the following rejections/positions are made.

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***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1,4,6,8,10,11,13-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Ishii et al. With respect to the holographic recording claims (both the apparatus, claims 1-6, and 11-14, method claims 8 and 15);

Ishii et al discloses an optical holographic recording/reproducing apparatus/system wherein a light source, 20 is appropriated divided (by element 21), into an information signal portion and a reference beam portion – see the disclosure starting at col. 2 line 29 and continuing till the end of the document. The one-dimensional spatial modulating unit is element 27, while element 40 is the recording film – the examiner interprets such to be inherently moving and hence a moving unit must be present. The plurality of gratings is found.

As far as the examiner can decipher the above *independent claims*:

The apparatus of group Ia, (claim 1), group Ib (claim 11), and group Ic (claim 18) are met.

With respect to apparatus claim 11, the luminance component is interpreted as the reference beam.

With respect to the newly introduced limitations, the plurality of gratings has been previously addressed.

With respect to the ultimate wherein clauses of the above claims, such is considered a desired functional result that **MUST INHERNTLY** flow/follow from the elements positively recited in the claim. If applicant can convince the examiner that such cannot follow from the elements positively recited, then the claims are incomplete/indefinite.

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With respect to claims 4 and 13 such a capability must inherently be present. Again, these dependent claims merely recite that the modulation unit is positioned. It doesn't recite any element for doing such positioning, and hence must follow from the elements recited.

With respect to claims 6 and 14, the light quantity controlling capability is present, see the discussion with respect to the on, off capability of the laser light projected onto the record medium.

The recording method claims groups IIa and IIb are met when the above system operates.

With respect to the product by process claims, groups IIIa and IIIb, such are present when the above system performs its function.

With respect to claim 19, a holographic disc is present.

With respect to claim 20, a reproducing apparatus is present.

### ***Response to Arguments***

Applicant's arguments filed 3/7/07 have been fully considered but they are not persuasive.

Applicant's arguments focus upon the terms

a) "oblique", "offset", "shifted". As interpreted above, such are purely desired results that must follow from the structure of elements positively recited. Since the structural elements are met, the desired result must follow.

If applicant can convince the examiner that such does not flow from the structure of elements recited, then naturally more rejections under 35 USC 112 will be introduced – i.e., the claims are incomplete in recited a result that does not follow from the elements recited. See also the insufficient disclosure rejection.

### ***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

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2. Claims 3 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over the art as applied to claim 1 as stated above in paragraph 1, and further in view of Satoh et al (489).

The use of a disc as an optical record is well known and taught in this environment by Satoh et al. It would have been obvious to modify the base system of Ishii et al and use a different shaped optical record, motivation is to increase the flexibility and marketability of the final product (disc).

3. Claims 1,3-6,8,10,11,13-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Satoh et al either ('489), or ('480).

Either of the Satoh et al documents discloses optical/holographic recording and reproducing capability, apparatus, method and final product. Wherein a light source is provided for, the beam is appropriated split, divided, and appropriate one-dimensional modulation is performed upon a disc record medium.

As far as the examiner can decipher the above *independent claims*:

The apparatus of group Ia, (claim 1), group Ib (claim 11), and group Ic (claim 18) are met.

With respect to apparatus claim 11, the luminance component is interpreted as the reference beam. The zero order beam is interpreted as the luminance beam/portion of claim 11.

With respect to the newly introduced limitations, the plurality of gratings has been previously addressed.

The desired result(s) recited in the ultimate wherein clauses of the independent claims inherently are present/because such must inherently follow from the elements positively recited in the claims, else the result(s) cannot follow due to incomplete/missing elements.

The method limitations of groups IIa and IIb are met when the above systems operate, while the product claims are present.

The product by process claims, groups IIIa and IIIb are met when the above system performs its function.

The product, a holographic disc of claim 19 is met, as far as the claim recites product limitations.

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The reproducing apparatus of claim 20 is met, as far as it claims apparatus element(s).

***Response to Arguments***

Applicant's arguments filed 3/7/07 have been fully considered but they are not persuasive.

Applicant's arguments focus upon the terms

a) "oblique", "offset", "shifted". As interpreted above, such are purely desired results that must follow from the structure of elements positively recited. Since the structural elements are met, the desired result must follow.

If applicant can convince the examiner that such does not flow from the structure of elements recited, then naturally more rejections under 35 USC 112 will be introduced – i.e., the claims are incomplete in recited a result that does not follow from the elements recited. See also the insufficient disclosure rejection.

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aristotelis M. Psitos whose telephone number is (571) 272-7594. The examiner can normally be reached on M-F: 6:00 - 2:30.

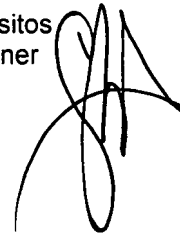


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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dwayne D. Bost can be reached on (571) 272-7023. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Aristotelis M Psitos  
Primary Examiner  
Art Unit 2627

A handwritten signature in black ink, consisting of a stylized 'A' followed by a large, loopy flourish that extends downwards and to the right.

AMP